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P1: ADJACENT-LETTER FLANKING BIGRAMS AFFECT LEXICAL DECISION PERFORMANCE

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Adjacent-letter Flanking Bigrams Affect Lexical Decision Performance

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Abstract

In a lexical decision task in which target strings were flanked by pairs of bigrams, Grainger, Mathot, and Vitu (*Acta Psychologica,* 2014) found, for words, better performance when flanking bigrams contained target-string letters (e.g., BI BIRD RD; RD BIRD BI; IB BIRD DR; DR BIRD IB) than when they did not (e.g., CE BIRD NT); better performance when flanking bigrams contained letters ordered as in the target (e.g., BI BIRD RD; RD BIRD BI) than switched (e.g., IB BIRD DR; DR BIRD IB); and that only letter order within bigrams—not bigram order relative to the respective target—affected performance. Palinski (CSU Master's thesis, 2016) replicated these findings. In each of those experiments, on 80% of trials, flanking bigrams were composed of letters from the target. We conducted a new experiment in which only 50% of trials involved flanking bigrams whose letters were in the target. We again found, for words, more efficient responding when flanking bigrams contained target letters than when they did not and when flanking-bigram letters were ordered as in the target than switched. These effects do not depend on the proportion of trials on which flanking bigrams are composed of target letters.